

**MAGNETICALLY ACTUATED MICRO-ELECTRO-MECHANICAL
APPARATUS AND METHOD OF MANUFACTURE****Abstract of the Disclosure**

An array of magnetically actuated MEMS mirror devices is provided
5 having stationary magnets configured to provide strong magnetic fields in the
plane of the mirrors without any magnets or magnet-system components in the
plane of the mirrors. Also, a magnetically actuated mirror device is provided
that includes an improved actuation coil configuration that provides greater
torque during mirror actuation. In addition, a mechanism is provided to detect
10 the angular deflection of a moveable mirror. Also, an improved process is
provided for manufacturing MEMS mirror devices.